

# Recurrent miscarriage

Information for patients



This leaflet has been produced to explain what recurrent miscarriage is and how it is managed at Leeds Centre for Women's Health and at Leeds Fertility.

You can find further information at:  
[www.leedsfertilityclinic.co.uk](http://www.leedsfertilityclinic.co.uk)

**How to contact us:**

Please see Page 15 for urgent and non-urgent contact details.

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## What is a miscarriage and what is *recurrent miscarriage*?

Miscarriage is when a baby is lost before 24 weeks of pregnancy. Early miscarriage (first 12 weeks) occurs in around one in five pregnancies. Late miscarriages (after 12 weeks) occur in around 1 to 2 pregnancies out of every 100.

A **recurrent miscarriage** is when a miscarriage happens **three or more times**. Recurrent miscarriage happens to 1 in 100 couples.

### The recurrent miscarriage clinic

This is a specialist clinic designed to support and counsel those couples who have experienced recurrent miscarriage and also to investigate for an underlying cause. Your partner is encouraged to attend this clinic with you.

Your first appointment will be to gather relevant information about both of you and arrange the investigations. We understand that you may have given this information many times and it can be upsetting but it is important that we are aware of your situation to offer you the best care. We will discuss what is understood about recurrent miscarriage and recommend the best tests and treatment for your situation.

## Causes of miscarriage and recurrent miscarriage

- **Age** - In women over the age of 40, at least one in two pregnancies end in a miscarriage. Couples with a woman over 35 and a man over 40 are most at risk of miscarriages.
- **Antiphospholipid syndrome (APS or sticky blood)** - 15% of women with recurrent miscarriage have 'sticky blood' which can lead to a pregnancy not attaching properly to the mother in the very early stages. It is the most important treatable cause of miscarriage.
- **Thrombophilia** - This is a genetic condition that can make your blood more likely to clot and can cause recurrent miscarriage or late pregnancy complications. Treatments are available to reduce the risks of harm if this is identified.
- **Genetic abnormalities** - One or both of the parents may have slight variations in their chromosomes (2-5%) that may be passed on to the baby. Sometimes the new combination of genes is too abnormal to allow the pregnancy to continue and it is right that nature lets these pregnancies go. Specialist genetics advice is available as these problems are often unique and can be complex to understand. Treatments may be available to help avoid some bad combinations of genes.
- **Polycystic ovary syndrome (PCOS)** - Is a condition that involves hormonal imbalances and can be linked with miscarriage and recurrent miscarriage. There are things that can be done to help improve this situation if it is found. Please see separate patient information on PCOS. (See **Useful resources page 14**).

- **A weak cervix** - Miscarriage between 14 and 23 weeks of pregnancy is rarely due to a weakness in the neck of the womb (cervix). This is rare and can not be predicted before it happens for the first time. Tests and treatment are available through the specialist service at Leeds Centre for Women's Health.
- **Developmental problems of the baby** - Some abnormalities of the baby may lead to a miscarriage but are unlikely to be the cause of recurrent miscarriage.
- **Mild infections are unlikely to cause miscarriage** - Bacterial vaginosis (BV) causes a smelly gray vaginal discharge and is due to an imbalance in the bacteria that normally live in the healthy vagina. It has been linked to early miscarriage. It is not sexually transmitted and is easy to treat with antibiotics.
- **The shape of the uterus** - The womb develops in two halves and they should become one single cavity. Sometimes the partition does not dissolve completely between the two and leaves a 'curtain' called a septum. This is associated with recurrent miscarriage. Small deformities such as a heart-shaped womb cavity are not associated with recurrent pregnancy loss.
- **Hormonal diseases** - Diabetes or thyroid disorders can be cause miscarriages but do not cause recurrent miscarriage if treated and kept under control.
- **Immune factors** - Sometimes the immune system does not respond in the usual way to the arrival of a pregnancy in the womb. This area is being investigated carefully to try to understand it better. Some tests and treatments may be possible as part of medical research.

- **Lifestyle factors** - Miscarriage is associated with being overweight (BMI more than 25 kg / m<sup>2</sup>), smoking, alcohol intake (more than 5 units per week), and excessive caffeine intake (more than 2 cups per day).

## What tests can we do?

- **Blood tests** - To check for any abnormalities in the blood clotting process and presence of any abnormal antibodies. If you are found to have anti phospholipid antibodies, you will need a repeat test 12 weeks later to confirm the diagnosis.
- **Genetic testing** - Genetic testing of the pregnancy tissue is offered with the third pregnancy loss. If a genetic problem is identified, the parents will be given the option to have their genetics (chromosomes) tested.
- **Ultrasound** - A 3D pelvic ultrasound scan to see if the womb has an unusual shape or other abnormality (especially if you have not had a full term pregnancy before). Further tests may be required if an abnormality is suspected.
- **Blood tests and/or vaginal swabs** - Can also be taken to test hormonal levels, rubella immunity and for pelvic infections.
- **Uterine Natural Killer Cells** - This test of the immune system is offered within a research project and is not funded by the NHS. Please ask for more information if you are interested in taking part.

## What happens next?

We will usually see you in 6-12 weeks to discuss your test results as a couple. Depending on the results, one or more of the following options may be offered.

### Treatment options

- **Treatment for APS** - Treatment with low-dose aspirin (75mg) tablets and heparin injections in pregnancy increases your chance of having a baby.
- **Treatment for thrombophilia** - There is not enough evidence at present but you may still be offered the treatment with heparin to reduce the risk developing a blood clot in pregnancy.
- **Referral for genetic counselling** - If either you or your partner has a chromosome abnormality, you will be offered an appointment to see a clinical geneticist.
- **Treatment for a weak cervix** - If you had a late miscarriage between 14 and 24 weeks, you may be offered regular ultrasound scans to measure the length of the cervix. If there are any signs that it is shortening, an operation may be discussed to put a stitch in the cervix to hold it closed until the baby is due.
- **Surgery to the uterus** - You may be offered surgery to correct a womb abnormality such as a septum. The evidence that surgery helps reduce miscarriage is not clear for minor abnormalities and you may be advised against surgery.



- **Hormonal treatment** - Progesterone or HCG injections in early pregnancy can be tried but there is evidence that suggests they do not work for some women with recurrent miscarriage. They do not cause harm although injections can be uncomfortable.
- **Steroids** - Early research is suggesting prednisolone steroid hormone tablets may improve the chances of a good pregnancy outcome in women found to have an imbalance of immune cells in the womb (uterine natural killer or U-NK cells). **The u-NK cell test needs to be self-funded first.**
- **Immunotherapy** - Treatment (e.g. Intralipids) to prevent or change the response of the immune system is not recommended as it has not been proven to work.

## What if all your tests are normal?

In over half of the couples being investigated for recurrent pregnancy loss, no underlying problem can be found: the losses are 'unexplained'. We understand that this may be frustrating however, it is important to remember that the chances of carrying a pregnancy as far as the birth of a live baby next time about 75%.

## Help and support during your next pregnancy

As soon as you become pregnant again, please contact us so that we can ensure that you receive all the treatment and support you need. We do offer regular pregnancy scanning to check progress from six until 12 weeks when your first antenatal scan will take place.

### **Recurrent miscarriage clinic at Leeds Centre for Women's Health, St James's Hospital:**

- **Telephone: 0113 206 5473 (Early Pregnancy Unit)**

### **Recurrent miscarriage clinic at Leeds Fertility (for existing patients of Leeds fertility only):**

- **Telephone: 0113 206 3178 (Advanced Nurse Practitioner)**

Women who have supportive care from a dedicated recurrent miscarriage clinic have a better chance of a successful birth.

It is worth remembering that the majority of couples (three in five) will have a successful pregnancy the next time even after three miscarriages in a row.

If you have any concerns or questions, please ask your recurrent miscarriage clinic team - we are here to help.

## Glossary

- **Antiphospholipid antibody Syndrome (APS):** Also known as 'Sticky Blood'- in this condition the body produces antibodies against itself (autoimmunity). Antibodies are normally part of the natural defence process to fight things which have entered the body when they should not do so- eg infectious bacteria. In autoimmune conditions the antibodies attach to healthy tissue and cause problems, in this case making the blood more sticky than it should be. Something makes this happen- it is not inherited (passed down from parent to child). It is thought that this affects the network of tiny blood vessels as they allow the very early pregnancy to take root (implant) in the womb lining. If small blood clots form, the afterbirth does not make a good connection and miscarriage is more likely.
- **Aspirin** - This common painkiller also has a useful side-effect as a blood-thinner.
- **Bacterial vaginosis:** The vagina contains lots of bacteria under normal, healthy circumstances. They are part of the protective defence against infection and it is important not to try to 'wash' inside the vagina for this reason. Sometimes the balance is disturbed and other bacteria can multiply causing unpleasant symptoms (smell and discharge). The imbalance called Bacterial vaginosis has been linked to miscarriage and is easily treated with antibiotics. It is always best to be checked (by your GP) if you are concerned, but a clear / white, non-smelly vaginal discharge is normal and quite healthy.

- **BMI** - Body Mass Index is the calculation of your body weight relative to your height and tells you whether you are a healthy weight or not. To calculate your's go to: [www.nhs.uk](http://www.nhs.uk) search BMI for an online tool.
- **Chromosomes**: These are the packages of DNA that carry the code for life. They can be imagined like a set of 23 books that all belong together to tell the unique story of the individual. Eggs and sperm have 23 single chromosomes and other cells have 23 pairs - 46 in total. The 23rd pair is XX in girls and XY in boys.
- **Heparin** - This is an injection which is safe in pregnancy and helps to thin the blood in people with an increased risk of developing a clot.
- **Immune system** - The body's natural defense mechanisms against infections and toxins- there are many including the skin, stomach acid, but in this context we mostly mean antibodies and white blood cells that work together to fight inflammation and infection.
- **Intralipids** - This is a fatty emulsion made from soy, egg and glycerine, which is given directly into a vein. It has been thought to help reduce inflammation from natural killer cells but there is no good supporting science and it is not recommended by many high authorities in women's health (Royal College of Obstetricians and Gynaecologists, British Fertility Society, European Society for Human Reproduction and Endocrinology).

- **Prednisolone** - A powerful anti-inflammatory steroid tablet which must only ever be taken under medical instruction and must never be stopped suddenly (always tail down the dose over several days / weeks). Ask your doctor about side-effects if it is recommended to you.
- **Thrombophilia** - This is another sticky blood problem in a different part of the blood clotting system which also increases the risk of clot formation. There are lots of different causes and these ones are inherited. There may be a family history of blood clots or illnesses (or deaths) related to them e.g. deep vein thrombosis, pulmonary embolus, stroke, heart attack.
- **Uterine natural killer cells** - These are one population of immune system cells that are found inside the womb and may play a part in the acceptance (or not) of a new pregnancy. Steroid hormones can dampen down the uNK cell population.
- **Uterine septum** - This is a partition in the middle of the womb which should have dissolved before birth. It may be a small dimple or a complete curtain dividing the womb into two halves. A long, fibrous septum provides a poor base for a pregnancy to implant and develop a good blood connection with the mother. This is quite rare but can be treated with keyhole surgery inside the womb.

## Useful resources

### Charlies Angel Centre Foundation

- [www.charlies-angel-centre.org.uk](http://www.charlies-angel-centre.org.uk)
  - Email: [charliesangelcentre@hotmail.com](mailto:charliesangelcentre@hotmail.com)
- Telephone: 0113 808 1507

This organisation supports bereaved parents and families with free telephone, online and face-to-face counselling.

### Fertility Network UK

- [www.fertilitynetworkuk.org](http://www.fertilitynetworkuk.org)

The UK's leading fertility support network offering extensive information and support with getting pregnant.

### Leeds Fertility

- [www.leedsfertilityclinic.co.uk](http://www.leedsfertilityclinic.co.uk)

Leeds fertility website provides a lot of useful information on the services the clinic provides as well as patient information on conditions such as Polycystic ovary syndrome (PCOS).

### The Miscarriage Association

- [www.miscarriageassociation.org.uk](http://www.miscarriageassociation.org.uk)

If you have been affected by miscarriage, ectopic pregnancy or molar pregnancy you will find information and support here.

## Contact us

**Leeds Centre for Women's Health  
(Ward 24 St James's University Hospital)**

- **Early Pregnancy Unit, Telephone: 0113 206 5473**
- **Ward 24, Telephone: 0113 206 5724**

**Leeds Fertility (*for existing patients only*)**

- **Nurse Specialist, Telephone: 0113 206 3102**
- **Advanced Nurse Practitioner, Telephone: 0113 206 3178**
- **Counselling Service appointments,  
Telephone: 0113 206 3111**

